

ABSTRACT OF THE DISCLOSURE

An equalizer and an equalizing method of optical recording/reproducing apparatus capable of enhancing equalizing performance and equalizing speed are disclosed. The equalizer includes a FF unit having a feedforward filter for removing pre-cursor from inter-symbol interference of input signal, a FB unit having a feedback filter for predicting post-cursor of the inter-symbol interference and outputting it, a first adder and a second adder for adding the signal from the FF unit and the signal from the FB unit, to remove the inter-symbol interference, a slicer for deciding the level of the signal from the first adder to be a predetermined level and feeding back the level-decided signal to the FB unit, and a signal detection unit for outputting the signal having the inter-symbol interference removed by the second adder as a predetermined signal using at least one of a trellis structure method and a tree structure method.